

REMARKS

In an office action dated December 15, 2006, the Examiner rejected claims 1-7 and 9-15 under 35 U.S.C. §102(e) as anticipated by Venkatesan et al. (U.S. Patent 6,928,474); and rejected claims 8 and 16 under 35 U.S.C. §103(a) as being unpatentable over *Venkatesan*.

Applicants have corrected the chain of dependency in dependent claims 10-16.

Applicants have amended independent claims 1 and 9 to make certain clarifications. In particular, the claims are amended to clarify that user navigation information is collected from multiple user sessions and reflects user navigation behavior during those sessions, and that the correlating step correlates the success element and the user behavior within the user navigation information. As amended, the claims are patentable over the cited art.

Applicants' invention is intended to provide improved analysis of man-machine interfaces, and particular web interfaces, by defining one or more "success elements" (something identifying successful use of the interface during a user session), and analyzing the different user interface behavior of users who achieve the success criteria with respect to those who do not. It is particularly intended for a web interface, in which a web server provides multiple web pages which can be interactively navigated by the user. By defining success criteria (e.g., user completes a transaction, such as an on-line purchase, in the web session), it is possible to analyze the difference in interactive interface behavior (e.g., difference in the way pages are navigated) by the successful users vis-a-vis the unsuccessful ones. This insight can be used in a variety of ways. For example, by identifying certain branches taken by successful users by not be unsuccessful users at the same web page, one may infer that unsuccessful users are erroneously not taking the "successful" users' path, and may modify the web page in question to place greater emphasis on the preferred link or links as opposed to the ones which lead to an unsuccessful conclusion.

Venkatesan, cited by the Examiner, discloses a system for collecting data with respect to user navigation of a web site, analyzing the data, and modifying the web site in response to the analysis. While it is, in a general sense, a system for analyzing web navigation behavior, and in that sense similar to the system disclosed by applicants, *Venkatesan* does not disclose the use of a “success element” as that term is used in applicants’ claims, i.e. a success element associated with a user’s navigation, which is correlated to the user’s navigation behavior.

Applicants’ amended representative claim 1 recites:

1. A method for analyzing user behavior in a man-machine interface of a data processing system in which user action is tracked, characterized by the steps of:
 - (a) defining at least one *success element associated with user navigation within said man-machine interface occurring during a user session*,
 - (b) storing user navigation information from a plurality of said user sessions, said user navigation information being associated with said at least one success element and reflecting the user navigation behavior within said man-machine interface occurring during said plurality of said user sessions,
 - c) *correlating, within said user navigation information, said at least one success element to user navigation behavior within said man-machine interface occurring during said plurality of said user sessions*, and
 - d) performing a statistical analysis on a plurality of different sets of navigation information collected in respective different user sessions. [emphasis added]

Claim 9 contains recitations analogous to the italicized language above.

The Examiner does not clearly identify any particular feature of *Venkatesan* as a “success element”. The passage from *Venkatesan* cited as relevant discloses that recorded user navigation patterns can be analyzed to “...predict technical problems and system bottle necks ... determine popular web navigation sequences ... improve server performance ... determine least used web pages ... improve access times of web pages ... attract and retain visitors ... fulfill visitor needs ... assess and personalize the presentation of web pages...” etc. All of these things are general statements of goals of the analysis, rather than specific steps performed as part of the analysis.

As recited in applicants' amended claim 1 above, a "success element associated with user navigation within said man-machine interface occurring during a user session" is defined. The general goal of improving the interface through analysis of user navigation patterns does not amount to defining a "success element associated with user navigation .. occurring during a user session" The general goal is not associated with any particular user navigation or user session. Furthermore, such a general goal does not amount to "correlating, within said user navigation information, said at least one success element to user navigation behavior ... occurring during said plurality of said user sessions", as recited in amended claim 1. I.e., in accordance with amended claim 1, at least some data in the user navigation information is correlated to other data in the user navigation information.

The general goal of improving the interface does not necessarily involve such a correlation. It is true that applicants seek to improve the interface by performing an analysis which includes such a correlation. But *Venkatesan* teaches only the general goal. This goal is achieved by other means in *Venkatesan*. And those means do not involve defining a success element, or correlating the success element to the user navigation behavior within the user navigation information.

For all of the above reasons, independent claims 1 and 9 as amended are not anticipated by *Venkatesan*.

Nor are the claims obvious over *Venkatesan*. As explained above, applicants claims recite a specific form of analysis of user navigation behavior, in which the success of the user as defined by a "success element" is correlated to the user's navigation behavior for a plurality of user sessions. *Venkatesan* uses a different analytical approach, in which the patterns of all users in a sample of data are lumped together for purposes of analysis to determine most frequently taken paths, etc. There is no suggestion in *Venkatesan* of the specific analytical steps performed by applicants and recited in independent claims 1 and 9.

New independent claim 17 recites a method for analyzing user behavior in a web interface in somewhat different terms, but likewise recites elements neither taught nor suggested by *Venkatesan*. In particular, claim 17 recites defining a success element associated with user navigation of a web interface, the success element comprising “at least one user input indicating successful completion of an operation by a user during said user web session.” For the reasons stated above, *Venkatesan* does not teach or suggest such a limitation, and the disclosure of a general goal of improving the interface does not amount to such a “success element”. Claim 17 further recites analyzing user navigation information collected from multiple user sessions to identify differences between the behavior of different groups of users as defined by the success element. There is nothing in *Venkatesan* to teach or suggest this limitation. In *Venkatesan*, the collected data from all users is lumped together.

In view of the foregoing, applicants submit that the claims are now in condition for allowance and respectfully request reconsideration and allowance of all claims. In addition, the Examiner is encouraged to contact applicants’ attorney by telephone if there are outstanding issues left to be resolved to place this case in condition for allowance.

Respectfully submitted,
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